



OMB Approval Number: 2050-0095 Approved for Use Through: 4/95

PA-Score



Site Name: HUMMEL CHEMICAL CERCLIS ID No.: NJD002174712

Street Address: 185 FOUNDRY STREET

City/State/Zip: NEWARK, NJ

Investigator: DENNIS J. FOERTER, CHMM
Agency/Organization: U.S.EPA/ROY F. WESTON, INC.
Street Address: RARITAN PLAZA I - 4TH FLOOR

City/State: EDISON, NJ

Date: 7-28-94



** Only First WC Page Is Printed **

PA-Score 2.1 Scoresheets HUMMEL CHEMICAL - 08/23/94

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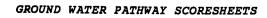
WASTE CHARACTERISTICS

ste Characteristics	(WC) Calculations:		
CONTAMINATED SOIL	Contaminated soil	WQ value	maximum
Area	1.00E+00 sq ft	2.94E-05	2.94E-0
	•		
v.			

Waste Characteristics Score: WC = 18

Ground Water Pathway Criteria List Suspected Release	
Are sources poorly contained? (y/n/u)	Y
Is the source a type likely to contribute to ground water contamination $(e.g., wet\ lagoon)$? $(y/n/u)$	N -
Is waste quantity particularly large? (y/n/u)	U
Is precipitation heavy? (y/n/u)	N
Is the infiltration rate high? $(y/n/u)$	N
Is the site located in an area of karst terrain? (y/n)	N
Is the subsurface highly permeable or conductive? $(y/n/u)$	N
Is drinking water drawn from a shallow aquifer? $(y/n/u)$	N
Are suspected contaminants highly mobile in ground water? $(y/n/u)$	N
Does analytical or circumstantial evidence suggest ground water contamination? $(y/n/u)$	N
Other criteria? (y/n) N	
SUSPECTED RELEASE? (y/n)	N
Summarize the rationale for Suspected Release:	

Ground Water Pathway Criteria List Primary Targets	
Filmary largets	
Is any drinking water well nearby? (y/n/u)	N
Has any nearby drinking water well been closed? $(y/n/u)$	N
Has any nearby drinking water well user reported foul-testing or foul-smelling water? (y/n/u)	N
Does any nearby well have a large drawdown/high production rate? (y/n/u)	N
Is any drinking water well located between the site and other wells that are suspected to be exposed to a hazardous substance? (y/n/u)	N
Does analytical or circumstantial evidence suggest contamination at a drinking water well? $(y/n/u)$	N
Does any drinking water well warrant sampling? (y/n/u)	N
Other criteria? (y/n) N	
Summarize the rationale for Primary Targets:	



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Pathway Characteristics				Ref.
Do you suspect a release? (y/n)			0	
Is the site located in karst terrain? (y/n) No			0	
Depth to aquifer (feet): 65				
Distance to the nearest drink	king water well	(feet): 2	1120	
				<u> </u>
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	Refe	cences
1. SUSPECTED RELEASE	0			
2. NO SUSPECTED RELEASE		500		
LR =	0	500		
Paraota		,	<u> </u>	***************************************

Targets

TARGETS	Suspected Release	No Suspected Release	References
3. PRIMARY TARGET POPULATION 0 person(s)	o		
4. SECONDARY TARGET POPULATION Are any wells part of a blended system? (y/n) N	0	o	
5. NEAREST WELL	0	0	
6. WELLHEAD PROTECTION AREA None within 4 Miles	. 0	o	
7. RESOURCES	0	5	
T =	0	5	

WASTE	CHARAC	TERI	STICS
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GROUND WATER PATHWAY SCORE:

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Ground Water Target Populations

Primary Target Population Drinking Water Well ID	Dist. (miles)	Population Served	Reference	Value
None				
*** Note : Maximum of 5 V	Vells Are Pi	cinted ***	Total	

Secondary Target Population Distance Categories	Population Served	Reference	Value
0 to 1/4 mile	0		0
Greater than 1/4 to 1/2 mile	0		0
Greater than 1/2 to 1 mile	0		O
Greater than 1 to 2 miles	0		O
Greater than 2 to 3 miles	0		O
Greater than 3 to 4 miles	0		0
		Total	0

PA-Score 2.1 Scoresheets
HUMMEL CHEMICAL - 08/23/94

Apportionment Documentation for a Blended System

Apportionment Documentation for a Blended System

Surface Water Pathway Criteria List Suspected Release	
Is surface water nearby? (y/n/u)	N
Is waste quantity particularly large? (y/n/u)	N
Is the drainage area large? $(y/n/u)$	N
Is rainfall heavy? (y/n/u)	N
Is the infiltration rate low? $(y/n/u)$	N
Are sources poorly contained or prone to runoff or flooding? $(y/n/u)$	N
Is a runoff route well defined(e.g.ditch/channel to surf.water)? $(y/n/u)$	Y
Is vegetation stressed along the probable runoff path? $(y/n/u)$	N
Are sediments or water unnaturally discolored? $(y/n/u)$	N
Is wildlife unnaturally absent? $(y/n/u)$	N
Has deposition of waste into surface water been observed? $(y/n/u)$	N
Is ground water discharge to surface water likely? (y/n/u)	N
Does analytical/circumstantial evidence suggest S.W. contam? (y/n/u)	N
Other criteria? (y/n) N	
SUSPECTED RELEASE? (y/n)	N
Summarize the rationale for Suspected Release:	



Is any target nearby? (y/n/u) If yes: N Drinking water intake Y Fishery Y Sensitive environment	Y
Has any intake, fishery, or recreational area been closed? $(y/n/u)$	N
Does analytical or circumstantial evidence suggest surface water contamination at or downstream of a target? $(y/n/u)$	N
Does any target warrant sampling? (y/n/u) If yes: N Drinking water intake N Fishery	N
N Sensitive environment	
Other criteria? (y/n) N	
Summarize the rationale for Primary Intakes:	

continued		
Other criteria? (y/n)	N	
Summarize the rationale for	PRIMARY FISHERY(IES) IDENTIFIED? (y/n)	N
	Crimary risheries.	
Other criteria? (y/n)	N	
PRIMARY SE	ENSITIVE ENVIRONMENT(S) IDENTIFIED? (y/n)	N
Summarize the rationale for	Primary Sensitive Environments:	

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SURFACE WATER PATHWAY SCORESHEETS

athway Characteristics						
Do you suspect a release? (y/n	0	***************************************				
Distance to surface water (fee	t):	2	640			
Flood frequency (years):		1	00			
What is the downstream distance (miles) to: a. the nearest drinking water intake? b. the nearest fishery? c. the nearest sensitive environment? 1.9						
LIKELIHOOD OF RELEASE	Suspected No Suspected LIKELIHOOD OF RELEASE Release Reference					
1. SUSPECTED RELEASE						
2. NO SUSPECTED RELEASE						
LR =	LR = 0 400					



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Drinking Water Threat Targets

TARGETS	Suspected Release	No Suspected Release	References
 Determine the water body type, flow (if applicable), and number of people served by each drinking water intake. 			
4. PRIMARY TARGET POPULATION 0 person(s)	o		
5. SECONDARY TARGET POPULATION Are any intakes part of a blended system? (y/n): N	o	o	
6. NEAREST INTAKE	o	0	
7. RESOURCES	0	5	
T =	0	5	

Drinking Water Threat Target Populations

(y/n)	Water Body Type/Flow	Population Served	Ref.	Valu

				0
				Total Primary Target Population Value Total Secondary Target Population Value

*** Note : Maximum of 6 Intakes Are Printed ***



Apportionment	Documentation	for a	Blended	System
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Human Food Chain Threat Targets

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TARGETS	Suspected Release	No Suspected Release	References	
8. Determine the water body type and flow for each fishery within the target limit.				
9. PRIMARY FISHERIES	0			
10. SECONDARY FISHERIES	0	12		
T =	0	12		

Human Food Chain Threat Targets

Primary (y/n)	Water Body Type/Flow	Ref.	Value		
N	Coastal,ocean,Gr.Lake		12		
N	Coastal,ocean,Gr.Lake		12		
N	Coastal,ocean,Gr.Lake		12		
N	Coastal,ocean,Gr.Lake		12		
N	Coastal,ocean,Gr.Lake		12		
Total Primary Fisheries Value					
	(y/n) N N N N Total	(y/n) Water Body Type/Flow N Coastal,ocean,Gr.Lake N Coastal,ocean,Gr.Lake N Coastal,ocean,Gr.Lake N Coastal,ocean,Gr.Lake N Coastal,ocean,Gr.Lake Total Primary Fisheries Value	(y/n) Water Body Type/Flow Ref. N Coastal,ocean,Gr.Lake N Coastal,ocean,Gr.Lake N Coastal,ocean,Gr.Lake N Coastal,ocean,Gr.Lake N Coastal,ocean,Gr.Lake		

*** Note : Maximum of 6 Fisheries Are Printed ***

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Environmental Threat Targets

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TARGETS	Suspected Release	No Suspected Release	References
11. Determine the water body type and flow (if applicable) for each sensitive environment.			
12. PRIMARY SENSITIVE ENVIRONMENTS	0		
13. SECONDARY SENSITIVE ENVIRONS.	0	10	
T =	0	10	

Environmental Threat Targets

Sensitive Environment Name	Primary (y/n)	Water Body Type/Flow	Ref.	Value
1 ESTUARINE WETLANDS	N	Coastal,ocean,Gr.Lake		0
2 STATE-LISTED ENDANGERED	N	Coastal,ocean,Gr.Lake		0
3 STATE DESIGNATED AREAS	N	Coastal,ocean,Gr.Lake		0

Total Primary Sensitive Environments Value Total Secondary Sensitive Environments Value *** Note: Maximum of 6 Sensitive Environments Are Printed ***

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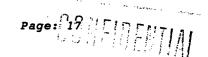
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Surface Water Pathway Threat Scores

Threat	Likelihood of Release(LR) Score	Targets(T) Score	Pathway Waste Characteristics (WC) Score	Threat Score LR x T x WC / 82,500			
Drinking Water	400	5	18	0			
Human Food Chain	400	12	18	1			
Environmental	400	10	18	1			

SURFACE	WATER	PATHWAY	SCORE:	2	
				l	

Soil Exposure Pathway Criteria List Resident Population	
Is any residence, school, or daycare facility on or within 200 feet of an area of suspected contamination? $(y/n/u)$	N
Is any residence, school, or daycare facility located on adjacent land previously owned or leased by the site owner/operator? (y/n/u)	N
Is there a migration route that might spread hazardous substances near residences, schools, or daycare facilities? (y/n/u)	N
Have onsite or adjacent residents or students reported adverse health effects, exclusive of apparent drinking water or air contamination problems? $(y/n/u)$	N
Does any neighboring property warrant sampling? (y/n/u)	N
Other criteria? (y/n) N	
RESIDENT POPULATION IDENTIFIED? (y/n)	N
Summarize the rationale for Resident Population:	



SOIL EXPOSURE PATHWAY SCORESHEETS

way Characteristics		Rei
Do any people live on or within 200 ft of areas of suspected contamination? (y/n)	No	
Do any people attend school or daycare on or within 200 ft of areas of suspected contamination? (y/n)	No	
Is the facility active? (y/n):	Yes	

LIKELIHOOD OF EXPOSURE	Suspected Contamination	References
1. SUSPECTED CONTAMINATION LE =	550	

Targets

 RESIDENT POPULATION resident(s) school/daycare student(s) 	o	
3. RESIDENT INDIVIDUAL	0	
4. WORKERS 1 - 100	5	
5. TERRES. SENSITIVE ENVIRONMENTS	0	
6. RESOURCES	5	
T =	10	

WASTE CHARACTERISTICS	
WC =	18
RESIDENT POPULATION THREAT SCORE:	1
NEARBY POPULATION THREAT SCORE:	2
Population Within 1 Mile: 10.001	- 50.000

SOIL EXPOSURE PATHWAY SCORE:

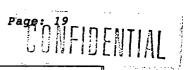
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Soil Exposure Pathway Terrestrial Sensitive Environments

Terrestrial Sensitive Environment Name	Reference	Value
1 NONE		<u></u>
		-

*** Note : Maximum of 7 Sensitive Environments Are Printed ***



Air Pathway Criteria List Suspected Release	
Are odors currently reported? (y/n/u)	N
Has release of a hazardous substance to the air	
been directly observed? $(y/n/u)$	N
Are there reports of adverse health effects (e.g., headaches, nausea, dizziness) potentially resulting from migration of hazardous substances through the air? (y/n/u)	N
Does analytical/circumstantial evidence suggest release to air? $(y/n/u)$	N
Other criteria? (y/n) N	
SUSPECTED RELEASE? (y/n)	N
Summarize the rationale for Suspected Release:	

AIR PATHWAY SCORESHEETS

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athway Characteristics				Ref.			
Do you suspect a release? (y/n	No	No					
Distance to the nearest indivi	0	0					
Suspected No Suspected LIKELIHOOD OF RELEASE Release Release Reference							
1. SUSPECTED RELEASE	0						
2. NO SUSPECTED RELEASE		500					
LR = 0 500							

Targets

TARGETS	Suspected Release	No Suspected Release	References
3. PRIMARY TARGET POPULATION 0 person(s)	o		
4. SECONDARY TARGET POPULATION	o	111	
5. NEAREST INDIVIDUAL	0	20	
6. PRIMARY SENSITIVE ENVIRONS.	0		
7. SECONDARY SENSITIVE ENVIRONS.	0	o	
8. RESOURCES	0	5	
T =	0	136	

WASTE CHARACTERISTICS			
	WC =	0	18
AIR PATHWAY SCORE:		15	

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Air Pathway Secondary Target Populations

Distance Categories	Population	References	Value
Onsite	99		5
Greater than 0 to 1/4 mile	70		1
Greater than 1/4 to 1/2 mile	2640		9
Greater than 1/2 to 1 mile	8410		8
Greater than 1 to 2 miles	43830		27
Greater than 2 to 3 miles	133560		38
Greater than 3 to 4 miles	231820	·	23
Total Secondary Population Value		111	

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Air Pathway Primary Sensitive Environments

Sensitive Environment Name	Reference	Valu
None		

Total Primary Sensitive Environments Value

*** Note: Maximum of 7 Sensitive Environments Are Printed***

Air Pathway Secondary Sensitive Environments

Sensitive Environment Name	Distance	Reference	Value
1 WETLANDS	>1/4-1/2		0.1
Total Secondary S	ensitive Environme	ents Value	0

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SITE SCORE CALCULATION	SCORE
GROUND WATER PATHWAY SCORE:	1
SURFACE WATER PATHWAY SCORE:	2
SOIL EXPOSURE PATHWAY SCORE:	3
AIR PATHWAY SCORE:	15
SITE SCORE:	8

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SUMMARY

Is there a high possibility of a threat to any nearby drinking wate well(s) by migration of a hazardous substance in ground water? If yes, identify the well(s).	or No
If yes, how many people are served by the threatened well(s)? 0	
Is there a high possibility of a threat to any of the following by	
nazardous substance migration in surface water?	
	No No
	No No
· Constitution of the character of the control of t	NO
If yes, identity the target(s).	
	,
Is there a high possibility of an area of surficial contamination within 200 feet of any residence, school, or daycare facility?	No
If yes, identify the properties and estimate the associated populat.	ion(s)
Are there public health concerns at this site that are not addressed by PA scoring considerations?	No
If yes, explain:	
	well(s) by migration of a hazardous substance in ground water? If yes, identify the well(s). If yes, how many people are served by the threatened well(s)? O Is there a high possibility of a threat to any of the following by hazardous substance migration in surface water? A. Drinking water intake B. Fishery C. Sensitive environment (wetland, critical habitat, others) If yes, identity the target(s). Is there a high possibility of an area of surficial contamination within 200 feet of any residence, school, or daycare facility? If yes, identify the properties and estimate the associated populat Are there public health concerns at this site that are not addressed by PA scoring considerations?

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REFERENCE LIST

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